REMARKS:

Claims 1-3 and 5-20 are pending.

Claims 1, 2, 3, 5, and 17 were rejected under 35 U.S.C. 103(a) as being unpatentable over Crutchfield (US Patent No. 4,765,325), claims 6 and 8 were rejected under 35 U.S.C. 103(a) as being unpatentable over Crutchfield, in view of DuBois (US Patent No. 3,948,589), and claims 18-20 were rejected under 35 U.S.C. 103(a) as being unpatentable over Crutchfield, in view of Zocca et al. (US Patent Publication 2003/0172925).

Crutchfield describes a method and apparatus for determining respirator face mask fit that involves measuring mask leakage with a flow meter after a test subject exhales most of the air from his lungs, holds his breath, and the air valve (i.e., breathing port) through which the test subject breathes is closed. See Col. 8, lines 53-55. Then, a vacuum source is used to create a chosen negative pressure (Col. 8, lines 59-63).

The Examiner contends that if a mask wearer holds his breath while the breathing port/air valve is open, then the mask interior will necessarily reach ambient pressure prior to the breathing port being closed and the fit testing commencing (see especially remarks on pages 3, 7 and 8 of the Office Action). However, this is not the case. Experience has shown that a mask wearer often continues to breath (whether consciously because of anxiety or unconsciously due to imprecise control of breathing reflex) even after being instructed to hold his breath. This frequently results in the intra-mask pressure being either well above or well below ambient pressure when the breathing valve is closed, and, thus, too high or too low for accurate fit testing to be determined within the relatively short time frame required (a mask wearer must be allowed to breath within about 8 seconds after holding his breath to avoid wearer discomfort and testing complications caused by movement, etc.). (see DECLARATION BY Clifton D. Crutchfield, Ph.D., paragraph 7).

In contrast to the disclosure of the subject application, which is specifically aimed at overcoming the problem of "imprecise breath holding" as described above, there is no disclosure in the cited reference that teaches or suggests a respirator fit-testing protocol in which ambient pressure inside the mask is achieved prior to closing the breathing valve and

initiating the fit testing as claimed in the subject application (see also DECLARATION BY Clifton D. Crutchfield, Ph.D., paragraph 8).

Accordingly, a person of ordinary skill would not find the invention of claim 1 to be obvious in view of U.S. 4,765,325 because at least step (c) ("activating a switch that closes a breathing port of said respirator, thereby initiating a controlled negative pressure testing protocol, when intra-respirator pressure substantially equals ambient pressure") is not disclosed or suggested. (see also DECLARATION BY Clifton D. Crutchfield, Ph.D., paragraph 9).

Similarly, the apparatus claim 17 includes a recitation that substantially tracks the language of claim 1 (i.e., "wherein activation of the switch closes said breathing port of said respirator and initiates a controlled negative pressure testing protocol after intra-respirator pressure substantially equals ambient pressure."). Consequently, this claim also cannot be rendered obvious by Crutchfield. Moreover, as all other claims depend from either claims 1 or 17, these claims likewise are not obvious.

In view of the foregoing, the applicant respectfully submits that the claims are distinguishable from the cited art, and, thus, present patentable subject matter.

Aside from the fee due to request continued examination, no fee is believed to be due with this response. Please charge any unforeseen costs to our Deposit Account No. 17-0055.

Respectfully submitted,

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